| Inde | x of | Claims | ; |
|------|------|--------|---|
|      |      |        |   |

| Application No. | Applicant(s) |
|-----------------|--------------|
| 10/603,710      | BEUTH ET AL. |
| Examin r        | Art Unit     |
| Bernard E Souw  | 2881         |

| <b>√</b> | Reject d |
|----------|----------|
| =        | Allowed  |

| 1 | (Through numeral)<br>Cancelled |
|---|--------------------------------|
| + | Restricted                     |

| N | Non-Elected  |
|---|--------------|
| ı | Interference |

| Α | App al   |
|---|----------|
| 0 | Objected |

| Cla      |          | Date   |                 |          |          |          |                 | ]::::           | Cla      | Claim Date |  |          |              |                 | ]::::         | С        | aim  | . Date        |          |          |          |          |          |                 |           |          |                 |          |          |          |          |
|----------|----------|--|-----------------|----------|----------|----------|-----------------|-----------------|----------|------------|--|----------|--------------|-----------------|---------------|----------|--|---------------|----------|----------|----------|----------|----------|-----------------|-----------|----------|-----------------|----------|----------|----------|----------|
|          |          | 40/20/20   |                 |          |          |          |                 |                 |          | 7          |  |          |              |                 | $\neg$        |          |  | П             |          | ]        |          |          |          |                 |           |          |                 | П        |          | Т        | ٦        |
| <u>0</u> | Original | 12   |                 |          |          |          |                 |                 |          |            | <u></u>  | Original |              |                 |               |          | 1  |               |          |          | Final    | Original |          |                 |           |          | - 1             |          |          |          |          |
| Final    | Ē        | 12   | .               |          |          |          |                 |                 |          |            | Final  | Ğ.       |              |                 |               |          |  |               |          |          | 這        | į        |          |                 |           |          | ļ               |          |          |          |          |
|          | 0        | $ \tilde{c} $  |                 |          |          |          |                 |                 |          |            | ı  | 0        |              |                 |               |          | 1  |               |          |          |          | 0        |          |                 |           |          | - 1             |          | ł        |          | -        |
|          | 1        | 写  | $\neg$          | $\neg$   | $\neg$   |          |                 | $\neg$          | $\neg$   | 7          | $\vdash$   | 51       |              | $\neg$          | 一             | $\dashv$ | 1  |               | _        | 1        |          | 101      |          | Ħ               |           |          |                 | T        | 7        | ┪        | ٦        |
| 2        | 2        | ءَ   | $\neg$          | 一        |          |          |                 |                 | _ -      | 7          |  | 52       |              | T               |               | 1        | 1  |               |          | 1        |          | 102      |          | $\Box$          |           |          | $\neg$          |          | T        | $\neg$   | ٦        |
| 3        | 3        | Ξ  | _               | 一        |          |          |                 |                 |          | 7          |  | 53       |              |                 | $\neg$        | _        | 1  | $\sqcap$      | $\neg$   | 1        |          | 103      |          | $\neg$          |           |          |                 | ヿ        | 寸        | 十        | ٦        |
| ú        | 4        | 2  | _               | $\neg$   |          | $\Box$   | _               |                 | _        | 7          |  | 54       | Н            | $\dashv$        | $\dashv$      |          | 1  | $\Box$        | $\top$   |          |          | 104      |          |                 |           | $\neg$   |                 | T        | 1        | $\neg$   | ٦        |
| 7        | 5        | =  |                 | _        |          |          | $\neg$          | $\neg$          | $\dashv$ | <b>-</b>   |  | 55       | П            | $\dashv$        |               | 1        | <del>                                     </del> |               | $\dashv$ | 1        |          | 105      |          |                 |           |          |                 | ヿ        | T        | $\neg$   | ヿ        |
| 10       | 6        | Ξ  | $\neg$          | 一        | $\dashv$ |          | $\neg$          |                 | _        | -          |  | 56       | M            | $\neg$          | _             | 1        | 1  | Ħ             |          | 1        |          | 106      | _        |                 |           |          |                 | 一        | _        | $\top$   | ヿ        |
| 1        | 7        | =  | $\exists$       | 寸        |          |          |                 | _               | -        | -          | $\vdash$   | 57       | H            | $\dashv$        | $\dashv$      | _        | ╁  | $\vdash$      |          |          |          | 107      | _        | $\Box$          |           |          | $\neg$          | 一        | 十        | $\dashv$ | ヿ        |
| 8        | 8        |  | $\neg$          | _        | ᅥ        | $\vdash$ |                 |                 |          | -          | $\vdash$   | 58       |              | $\exists$       |               | _        | 1  |               | $\dashv$ | 1        |          | 108      |          |                 |           |          |                 | $\neg$   | 7        | _        | ┪        |
| 9        | 9        | 17/1   |                 | _        | $\dashv$ | $\neg$   |                 |                 |          | ⊟          | $\vdash$   | 59       | m            |                 | _             | +        | +  | $\vdash$      | $\dashv$ | 1        |          | 109      |          |                 | $\neg$    | 一        |                 | 一        | 十        | _        | ┨        |
| 10       | 10       | =  | $\dashv$        | $\dashv$ |          |          |                 |                 |          | -          | $\vdash$   | 60       | tт           |                 | $\dashv$      | +        | <del> </del>                                     | $\vdash$      |          |          |          | 110      |          | H               | $\dashv$  | $\dashv$ |                 | ┪        | $\dashv$ | +        | ᅥ        |
| ii       | 11       | 2  |                 | $\dashv$ | $\dashv$ | -        | -               |                 |          | -          | $\vdash$   | 61       | $\vdash$     | $\neg$          | $\dashv$      | +        | +  | $\vdash$      |          | 1        |          | 111      |          | Н               |           | $\dashv$ |                 | ┪        |          | $\dashv$ | ᅥ        |
| 12       | 12       | <u>-</u>   | $\dashv$        | $\dashv$ | $\dashv$ | $\vdash$ |                 | $\dashv$        | _        | $\dashv$   | <del>                                     </del> | 62       | $\vdash$     | $\vdash$        | $\dashv$      | +        | +-   | +-+           | $\dashv$ | 1        | -        | 112      |          | H               |           | $\dashv$ |                 | $\dashv$ | $\dashv$ | +        | $\dashv$ |
| 13       | 13       | 1  | $\dashv$        | $\dashv$ | $\dashv$ | $\vdash$ | $\vdash$        | $\dashv$        | _        | $\dashv$   | $\vdash$   | 63       | $\vdash$     | $\vdash$        | +             | +        | +  | +             | 1        | 1        |          | 113      |          | H               | $\dashv$  | $\dashv$ | $\vdash$        | $\dashv$ | $\dashv$ | $\dashv$ | ᅱ        |
| IV       | 14       | 1  | -               | -        |          | $\vdash$ | $\vdash$        | $\vdash$        | $\dashv$ | $\dashv$   | $\vdash$   | 64       | $\vdash$     | $\vdash$        | $\dashv$      | +        | +  | +             | $\dashv$ | 1        |          | 114      |          | $\vdash$        | $\dashv$  | -        | -               | -        | $\dashv$ | +        | $\dashv$ |
| 15       | 15       | 3  | -               |          | -        |          | $\dashv$        | $\dashv$        | $\dashv$ | -          | _  | 65       | $\vdash$     | $\dashv$        | -1            | +-       | +  | 1             | $\dashv$ |          |          | 115      | H        |                 | $\dashv$  | $\dashv$ | -               | $\dashv$ | $\dashv$ | +        | $\dashv$ |
| 11       | 16       | 7  | -               | $\dashv$ |          | Н        |                 | $\dashv$        | +        | -          |  | 66       | $\vdash$     | $\dashv$        | $\dashv$      | +        | +  | 1             | +        | 1        |          | 116      |          |                 |           | $\dashv$ | $\vdash$        | $\dashv$ | $\dashv$ | $\dashv$ | ┪        |
| 13       | 17       | 1  |                 | -        | -        |          | -               |                 |          | -          |  | 67       | Н            | $\dashv$        | $\dashv$      | +        | +-   | ╁┼            | _        | 1        |          | 117      | $\vdash$ | H               |           | -        | $\exists$       | -        | $\dashv$ | +        | ┥        |
| 18       | 18       | 2  | $\dashv$        | $\dashv$ | _        | $\vdash$ |                 | -               | -        | -          | -  | 68       | Н            | $\vdash$        | -+            |          | +-   | +             |          | 1        |          | 118      |          | $\vdash$        | $\dashv$  | $\vdash$ | $\dashv$        | $\dashv$ | -+       | +        | ᅥ        |
|          | 19       | =  |                 |          | -        |          | -               | $\dashv$        | -        | -          | <u> </u>   | 69       | Н            | $\dashv$        | $\dashv$      | +        | +  | $\vdash$      |          | 1        |          | 119      | H        | Н               |           | -        | $\vdash$        |          | -        |          | ᅱ        |
| 19       | 20       | =  | =               | $\dashv$ | $\dashv$ | $\vdash$ | _               | $\dashv$        |          | -          | <u> </u>   | 70       | Н            | $\vdash$        | -+            | ┽        | +  | $\vdash$      |          | 1        |          | 120      | $\vdash$ | H               |           |          | $\vdash$        | -        | $\dashv$ |          | $\dashv$ |
|          | 21       | Н  |                 | $\dashv$ | -        |          | -               |                 |          | -          | $\vdash$   | 71       | Н            | $\dashv$        |               | $\dashv$ | +  | +             | $\dashv$ | 1        |          | 121      | $\vdash$ | $\vdash$        |           |          | -               | $\dashv$ | $\dashv$ | +        | $\dashv$ |
| $\vdash$ | 22       | H  |                 | -        |          | $\vdash$ | -               | $\dashv$        | -        | - :::      | <u> —                                   </u>     | 72       | $\vdash$     | $\dashv$        | -             | +        | +  | ╁╌┼           | +-       | ┨        |          | 122      | $\vdash$ | $\vdash$        |           | $\vdash$ | $\dashv$        | -        | -        |          | ┥        |
| <u> </u> |          |  |                 |          |          |          | $\vdash$        | $\dashv$        | +        | -          | $\vdash$   | 73       | Н            | $\dashv$        | $\dashv$      |          | +  | ╁┼            | $\dashv$ | ł∷i      |          | 123      | ┝        | -               | $\dashv$  | -        |                 | -        |          |          | ┥        |
|          | 23       | $\vdash$   |                 | -        | -        | -        | -               | $\dashv$        | +        | -          | <u> </u>   | 74       | $\vdash$     | -               | -             |          | +  | $\vdash$      | +        | 1        |          | 124      | -        | Н               | $\dashv$  |          | $\dashv$        | -        | $\dashv$ |          | $\dashv$ |
|          | 24<br>25 |  |                 |          | -        |          |                 |                 | -        | -:::       | <del> </del>                                     | 75       | $\vdash$     | $\dashv$        | +             | +        | +  | $\vdash$      | +        | ł        | _        | 125      | -        | -               | -         | -        | $\vdash$        | -        | $\dashv$ |          | $\dashv$ |
|          | 26       |  |                 | $\dashv$ | _        | $\vdash$ |                 | $\dashv$        | +        | -          | <b> </b>   | 76       | $\vdash$     | Н               | $\dashv$      | +        | +  | ╂═┼           |          | -        |          | 126      | -        |                 | -         |          |                 | $\dashv$ | -+       | -        | $\dashv$ |
|          |          | $\vdash$   |                 | -        | _        | Н        | -               | $\dashv$        | +        | -          |  | 77       | Н            | H               | +             | +        |  | ╁╼┼           |          | -        | <u> </u> | 127      | $\vdash$ | Н               | $\dashv$  |          | $\dashv$        | $\dashv$ | -+       |          | $\dashv$ |
| -        | 27       | H  | _               | $\dashv$ | _        | Н        | -               | -               | -        | -          | ├—   |          |              | $\vdash$        | -+            |          |  | ╁╌┼           |          | -        |          |          | $\vdash$ | Н               | -         |          | $\dashv$        |          |          |          | $\dashv$ |
|          | 28       | Н  |                 | $\dashv$ | _        | Н        |                 | -               |          | - :::      | <u> </u>   | 78       | -            | $\vdash$        |               |          |  | ╌             |          | -        |          | 128      | -        | Н               | _         |          | $\dashv$        | $\dashv$ |          |          | $\dashv$ |
|          | 29       | $\vdash$   |                 | $\dashv$ | _        | Н        | -               |                 |          |            | <u> </u>   | 79       |              | $\dashv$        |               | -        | +-   | ╌             |          | -        |          | 129      | -        | $\vdash$        | -         | _        | -               | -        |          |          | $\dashv$ |
|          | 30       |  |                 | _        | _        | Ш        | Ш               |                 |          | -1:::      | <u> </u>   | 80       | 1            | $\dashv$        |               |          | +-   | ┦             | -        | -        |          | 130      | -        | -               | -         | _        |                 |          |          |          | $\dashv$ |
|          | 31       | Н  | -               | $\dashv$ | _        |          | $\dashv$        |                 | -        | -          | <u> </u>   | 81       | <b>├</b>     | $\vdash$        | -             | +        | +  | $\vdash$      | +        | -        | <u> </u> | 131      | ⊢        | -               | -         | _        |                 |          | $\dashv$ | -        | $\dashv$ |
|          | 32       | $\vdash$   | -1              | $\dashv$ | _        | Н        | Н               | -               | -        | -1:::      |  | 82       | _            | $\vdash$        |               |          |  | -             |          | 4::::    |          | 132      |          | Н               |           |          |                 |          |          |          | -        |
| <u> </u> | 33       |  |                 | $\dashv$ |          | Н        | Н               |                 | +        | -1:::      | ļ  | 83       | _            | $\vdash$        | <u> </u>      |          |  | 1-1           |          | -        |          | 133      | <u> </u> | Н               | $\dashv$  | -        | -               |          |          | _        |          |
| <u> </u> | 34       | $\vdash$   | Н               | _        |          | Ш        | Н               | -               | -        |            | <u> </u>   | 84       | $\vdash$     | $\vdash \vdash$ | +             |          |  | +             |          | 1        | <u> </u> | 134      | 1        | $\vdash \vdash$ | -         | Щ        | $\dashv$        |          | +        |          | ᅱ        |
| <u> </u> | 35       | <u> </u>   | $\vdash \vdash$ | 4        |          | Ш        | Ш               | -               | -        |            |  | 85       |              | $\vdash \vdash$ | $\rightarrow$ | +-       | +  | +             |          | 4        | <u> </u> | 135      | ⊢        | Н               |           |          | $\square$       |          |          | +        | $\dashv$ |
| ⊢—       | 36       | <b> </b>   | $\vdash \vdash$ | _        |          | Ш        | $\vdash \vdash$ | $\vdash \vdash$ | -        | - :::      | <u> </u>   | 86       |              | $\sqcup$        | -             | +        | $\perp$  |               |          | 4        | <u> </u> | 136      | $\vdash$ | $\vdash \vdash$ | $\square$ | Ш        | $\sqcup$        | -        | $\dashv$ | +        | 4        |
| ⊢—       | 37       | <u> </u>   | Н               | _        |          | Щ        | Ш               |                 |          | 4:::       |  | 87       | -            | $\vdash \vdash$ | 4             | +        | +  | <del>  </del> |          | 4        | <u> </u> | 137      | <u> </u> | $\vdash \vdash$ | Ш         | Ш        | $\sqcup$        | $\Box$   | $\dashv$ | +        | 긕        |
| <u> </u> | 38       | $\vdash$   |                 | _        |          | Щ        | $\sqcup$        | $\vdash \vdash$ | +        | -          |  | 88       | $\vdash$     | $\vdash \vdash$ | $\dashv$      | +        | +  | +             |          | 4        |          | 138      | <u> </u> | Н               | Ш         | Щ        | $\dashv$        | $\dashv$ | $\dashv$ | +        | ᅴ        |
| ⊢        | 39       | <b>_</b>   |                 |          |          | Щ        |                 | $\sqcup$        | -        | -          | <u> </u>   | 89       |              | $\vdash \vdash$ | $\dashv$      | +        | -  | $\vdash$      | _        | 4        | <u> </u> | 139      | <u> </u> | $\vdash \vdash$ | Ш         | Щ        | $\vdash \vdash$ | $\dashv$ | $\dashv$ | $\dashv$ | ᅴ        |
|          | 40       | $\vdash$   | Щ               | _        |          |          | Щ               | Ш               |          | -          | <u> </u>   | 90       | -            | $\vdash$        | $\dashv$      | -1-      | +  | ++            | _        | 1        | <u> </u> | 140      | <u> </u> | $\vdash \vdash$ | Ш         | Ш        | $\vdash \vdash$ | $\dashv$ | $\dashv$ | +        | $\dashv$ |
| <u></u>  | 41       | _  | $\sqcup$        | $\Box$   |          | Ш        | Ш               | Щ               | $\perp$  | 4          | <u> </u>   | 91       | $oxed{oxed}$ | Ш               | _             | _ _      | +  | 11            |          | 4        | <u> </u> | 141      | _        | Ш               | Ш         |          | $\sqcup$        | $\Box$   | $\dashv$ | 4        | ᅬ        |
| <b>├</b> | 42       | _  | Ш               | _        |          | Ш        | Ш               | Ш               |          | 4:::       | <u> </u>   | 92       | <del> </del> | $\vdash \vdash$ | -             | 4        | +  | $\vdash$      | -        | 4        |          | 142      | <u> </u> | Ш               | Ш         |          |                 | _        | -        | -        | $\dashv$ |
|          | 43       |  |                 |          |          | Щ        | Ш               | $\sqcup$        | _        | 4          |  | 93       | 1            | Ш               | $\perp$       | $\perp$  | $\perp$  | $\vdash$      |          | 4        | <u></u>  | 143      | <u> </u> | Ш               |           |          |                 |          | _        | _        | _        |
|          | 44       |  |                 |          |          |          | Ш               |                 |          | _          |  | 94       | $\vdash$     | Ш               |               | 4        | 4  | 1             |          | J.       |          | 144      |          |                 |           |          |                 |          | _        |          | 4        |
| $\vdash$ | 45       |  |                 |          |          |          | Ш               |                 |          | 4          | _  | 95       |              | Ш               |               |          |  |               |          | 1        |          | 145      |          |                 |           |          |                 |          |          |          | _        |
|          | 46       | $ldsymbol{ld}}}}}}$ |                 |          |          | Ш        | Ш               | Ш               |          | _          |  | 96       | 乚            | Ш               |               | ┸        | $\perp$  | $\sqcup$      |          | 1        |          | 146      |          | Щ               |           |          |                 |          | $\perp$  |          |          |
|          | 47       | $oxed{\Box}$   |                 |          |          | $\Box$   |                 |                 |          | _          |  | 97       |              | Ш               |               |          |  |               |          | <b>_</b> |          | 147      |          | $\Box$          |           |          | Ш               |          |          | $\bot$   |          |
|          | 48       |  |                 |          |          |          |                 | Ш               |          | _ :::      |  | 98       |              |                 |               |          |  |               |          |          |          | 148      |          |                 |           |          | Ш               |          | $\Box$   | _]_      |          |
|          | 49       | oxdot  |                 |          |          | Ш        | Ш               | Ш               |          | _          |  | 99       | _            | Ш               |               | $\perp$  | $\perp$  | $oxed{oxed}$  |          |          | L        | 149      | <u>L</u> |                 |           |          | Ш               |          |          |          |          |
|          | 50       |  |                 |          |          | LĴ       |                 | $\prod$         |          | _ :::      |  | 100      |              |                 |               |          | $\perp$  |               |          | ]::::    |          | 150      | L        |                 |           |          |                 |          |          |          | - 1      |